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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,507	01/09/2006	Christoph Nemmaier	P05,0069	9934
26574	7590	09/17/2007		
SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473			EXAMINER DONABED, NINOS J	
			ART UNIT 2109	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,507	Applicant(s) NEMMAIER ET AL.	
	Examiner Ninos Donabed	Art Unit 2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/09/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/10/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/29/2005, 3/10/2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 03/10/2007 was only partially considered because document numbered **100 56 060** and other prior art entitled "**SISA...**" do not have proper English translations. Examiner respectfully requests translation of said documents.

Claim Objections

2. Claim 34 is objected to because of the following informalities: **protol** should be spelt **protocol**. Appropriate correction is required.

Claims 35 and 38 are objected to because of the following informalities:
superordinate should be spelt **subordinate**. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 30, 33, 38, 42 and 43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Regarding Claim 30, the statement, "**value of the data object specifies a setting parameter**" is indefinite because it does not clearly define what the value is referring to.

Claim 33 recites the limitation "**the first data line**" in Line 1 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 38 recites the limitation "**the fourth control unit**" in Line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Regarding Claim 42, the term "**suitable**" is indefinite.

Regarding Claim 43, the term "**element**" used in context with the "**first control unit**" is indefinite.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 23-28, 30-32, 34, 36, 38, 42, 44 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Barnard et al., (**United States Patent No. 6,920,506**), herein referred to as Barnard.

Regarding claim 23, Barnard discloses a method for control of a printer or copier, comprising the steps of: **(See Figure 9 and Column 2 Line 61 through Column 3 Line 23, Barnard discloses a method for control of a printer or copier)**

transferring data between at least one first control unit and a second control unit via at least one data line; **(See Figure 9 and Column 7 Line 67 through Column 8 Line 2, Barnard discloses print jobs being transferred from a workstation to a network management device)**

associating a first identifier with the first control unit; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the computer)**

associating a second identifier with the second control unit; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the network management device)**

storing at least one data object in a storage region of the second control unit; and **(See Figure 2 and Claims 48 and 65, Barnard discloses a printer queue which stores the print jobs in the network management device)**

associating a third identifier with the data object, the first, second, and third identifiers comprising network addresses. **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address for the printer)**

Regarding claim 24, Barnard discloses method according to claim 23 wherein the network addresses are hierarchically organized and the third network address is hierarchically subordinate to the second network address. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a routing table, which is hierarchically organized and the third network address is hierarchically subordinate to the second network address)**

Regarding claim 25, Barnard discloses a method according to claim 23 wherein the second network address is determined with aid of the third network address. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a router and routing table. The print job is sent to the router and then to a network printer meaning the second network address is determined with aid of the third network address)**

Regarding claim 26, Barnard discloses a method according to claim 24 wherein a transfer path for access to the data object is predetermined by a hierarchical position of the third network address. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a router and routing table. The router predetermines the transfer path based on the third network address, a printer)**

Regarding claim 27, Barnard discloses a method according to claim 23 wherein data of the data object are read out from the storage region of the second control unit by

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the first control unit with aid of the third network address. **(See Figure 2 and Claims 48 and 65, Barnard discloses a printer queue which stores the print jobs in the network management device which are read out by the computer with the aid of the printer network address)**

Regarding claim 28, Barnard discloses a method according to claim 23 wherein the first control unit and the second control unit respectively form a network node. **(See figures 1 and 9, Barnard discloses a computer connected to a network management device, these devices are a network node)**

Regarding claim 30, as best understood, Barnard discloses a method according to claim 23 wherein a value of the data object specifies a setting parameter. **(See Column 10, Lines 14-46, Barnard discloses network setting information)**

Regarding claim 31, Barnard discloses a method according to claim 23 wherein the control units are hierarchically organized, the second control unit being hierarchically subordinate to the first control unit, and the network address of the second control unit being hierarchically subordinate to the network address of the first control unit. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a routing table. Information in a routing table is hierarchically organized. Since data is being passed from the first control unit to the second control unit, the second network address is hierarchically subordinate to the first control unit)**

Regarding claim 32, Barnard discloses a method according to claim 23 wherein at least one third control unit is provided that is connected with the second control unit via a second data line and is hierarchically subordinate to the second control unit, **(See Column 4 Lines 1-31, Barnard discloses that a MAC address for a network printer is obtained from the server)**

the data object being read out by the third control unit via the second data line. **(See Column 19 Line 44 through Column 20 Line 8, Barnard discloses that the print job is directed to the print server of network management device)**

Regarding claim 34, Barnard discloses a method according to claim 23 wherein the transfer over the first data line occurs with aid of the Simple Network Management Protocol. **(See Figure 9 and Column 11 Line 51 through Column 13 Line 12, Barnard discloses Simple Network Management Protocol)**

Regarding claim 36, Barnard discloses a method according to claim 23 wherein a position of the data object in the network is determined with aid of the network address of the data object. **(See Column 2 Lines 25-60, Barnard discloses an ip address for the printer, which gives the location on the network of the data object)**

Regarding claim 38, as best understood, Barnard discloses a method according to claim 23 wherein the first control unit is connected with the fourth control unit via a

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third data line, **(See Figure 9 and See Column 11 Lines 16 through Column 12 Line 12, Barnard discloses print jobs being transferred from a DHCP server to a printer)**

the fourth control unit being superordinate to the first control unit and has access to the data object with the aid of the first control unit. **(See Figure 9 and See Column 11 Lines 16 through Column 12 Line 12, Barnard discloses a routing table. Information in a routing table is hierarchically organized)**

Regarding claim 42, as best understood, Barnard discloses a method according to claim 23 wherein the first control unit comprises a base node of the network. **(See Column 13 Lines 10-47, Barnard discloses a network management device that allows access to the network)**

Regarding claim 44, Barnard discloses a device to control a printer or copier, comprising: **(See Figure 9 and Column 2 Line 61 through Column 3 Line 23, Barnard discloses a method for control of a printer or copier)**

at least one first control unit with which is associated a first identifier; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the computer)**

at least one second control unit with which is associated a second identifier; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the network management device)**

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at least one data line via which data is transferred between the first control unit and the second control unit; **(See Figure 9 and Column 7 Line 67 through Column 8 Line 2, Barnard discloses print jobs being transferred from a workstation to a network management device)**

the second control unit has a storage region in which at least one data object is storable; and **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the network management device)**

a third identifier is associated with the data object, the first, second and third identifiers comprising respectively a network address. . **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address for the printer)**

Regarding claim 45, Barnard discloses a method for control of a device which places indicia on a medium, comprising the steps of: **(See Figure 9 and Column 2 Line 61 through Column 3 Line 23, Barnard discloses a method for control of a printer or copier)**

transferring data between a first control unit and a second control unit via a data line; **(See Figure 9 and Column 7 Line 67 through Column 8 Line 2, Barnard discloses print jobs being transferred from a workstation to a network management device)**

associating a first identifier with the first control unit; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the computer)**

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associating a second identifier with the second control unit; **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses a IP address of the network management device)**

storing at least one data object in the second control unit; and
(See Figure 2 and Claims 48 and 65, Barnard discloses a printer queue which stores the print jobs in the network management device)

associating a third identifier with the data object, the first, second, and third identifiers comprising network addresses. **(See Figure 9 and Column 6, Lines 25-54, Barnard discloses an IP address for the printer)**

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 29, 33, 35 and 43** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard.

Regarding claim 29,

Barnard teaches a method according to claim 25,

Barnard further teaches that a range of MAC addresses could be used for a plurality of network printers. **(See Column 12 Lines 13-42, Barnard teaches a range of MAC addresses for network printers)**

Barnard further teaches that a routing table is used. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a routing table)**

Barnard does not explicitly teach that the third network address comprises a sub-address of the second network address.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to ensure that the third network address comprises a sub-address of the second network address because subdividing the address into sub-addresses keeps the network organized.

Regarding claim 33, as best understood,

Barnard teaches the method according to Claim 23.

Barnard fails to explicitly teach that a CAN bus connection, a LAN connection, a data line according to a V.24 standard, and a data line according to a SDLC standard can be used for the data connection.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use, a CAN bus connection, a LAN connection, a data line according to a V.24 standard, and a data line according to a SDLC standard because they are functionally equivalent and substitutable.

Regarding claim 35,

Barnard teaches the method according to Claim 23.

Barnard further teaches that a router is used. **(See Column 11 Line 50 through Column 12 Line 12, Barnard discloses a router)**

Barnard fails to explicitly teach that the routers are provided in the control units, the routers forwarding a read request to at least one network address hierarchically superordinate to the data object.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the router in the control unit because decreasing the number of parts in a system will cut cost. Also, one of ordinary skill in the art at the time the invention was made would have known to use the router to determine the proper path of a read request because this function is efficiently carried out by a router over a network.

Regarding claim 43, as best understood,

Barnard teaches the method according to Claim 23.

Barnard does not explicitly teach that the data object contains an element selected from the group consisting of a variable and a constant.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a numeric value to denote an element in the data object. And since a constant and a variable can be a number, using such would have been obvious to one of ordinary skill in the art.

8. Claims 37, 39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard in view of Nomura (**United States Patent Number 6,115,392**).

Regarding claim 37, as best understood,

Barnard teaches the method according to claim 32.

Barnard fails to explicitly teach that commands transferred by a fourth control unit according to a first data transmission standard are translated by the first control unit into commands of a second data transmission standard, and the data transferred to the first control unit by the second control unit according to the second data transmission standard are translated by the first control unit into data according to the first data transmission standard.

Nomura teaches a first data transmission standard are translated by the first control unit into commands of a second data transmission standard, and the data transferred to the first control unit by the second control unit according to the second data transmission standard are translated by the first control unit into data according to the first data transmission standard. **(See, Column 2 Line 51 – Column 3 Line 65, Nomura teaches converting data of a first transmission standard into data of a second transmission standard and vice versa)**

It would have been obvious to a person of ordinary skill in the art at the time the invention was made combine Barnard and Nomura because different devices may apply

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different data transmission standards. In order for these devices to be able to communicate with other devices, which apply different data transmission standards, it would be necessary to translate between the different standards.

Regarding claim 39,

Barnard teaches the method according to claim 37.

Barnard fails to explicitly teach that the first, second and third control units are arranged in the printer or copier, and the fourth control unit is arranged outside of the printer or copier and is connected with the printer or copier over a third data line.

However, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to arrange the first, second and third control units in the printer or copier for the benefit of making an integral system, which is cost efficient. It would have also been obvious to a person of ordinary skill in the art at the time the invention was made to arrange the fourth control unit outside of the printer or copier, which is connected with the printer or copier over a third data line to make the system separable and easier to replace if the device fails.

Regarding claim 41, as best understood, Barnard teaches a method according to claim 37 wherein the fourth control unit comprises a personal computer with suitable software. **(See Column 2 Lines 36-59, Barnard teaches software for use in the network administrator)**

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9. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnard in view of Nomura of further in view of Morisaki et al. (**United States Patent Publication Number 2003/0053104**), herein referred to as Morisaki.

Regarding claim 40,

Barnard in view of Nomura teaches the method according to claim 37,

Barnard in view of Nomura fails to teach the third data line is designed according to a V.24 standard, and the printer or copier is connected with the fourth control unit for maintenance and setting jobs, the data of the data object being read out via the fourth control unit.

Morisaki teaches a maintenance and setting tool for use with a printer. (See Paragraphs [0055]-[0057])

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the V.24 standard to design the third data line because it would have been a well known standard used for data connection which is easily applied. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barnard in view of Nomura with Morisaki in order to increase the longevity of the printer or copier. Finally, it would have been obvious to one skilled in the art at the time the invention was made to use a forth control unit for maintenance and setting because it makes the system separable and easier to replace malfunctioning parts.

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Conclusion

10. Any response to this Office Action should be **faxed** to (571) 272-8300 or **mailed** to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, Virginia 22314

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ninos Donabed whose telephone number is (571) 270-3526. The examiner can normally be reached on Monday-Friday, 7:30 AM-5:00 PM EST.

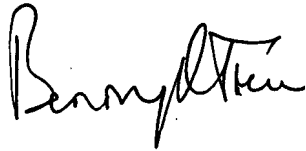
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on (571) 272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ninos Donabed
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